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COMBINING QUANTITATIVE AND QUALITATIVE METHODS IN THE EVALUATION OF AN ALTERNATIVE TO CONVENTIONAL HIGH SCHOOLS

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ABSTRACT: *A report is provided of an evaluation of two "Senior Colleges" designed to offer viable alternatives to traditional secondary education for students above the age of compulsory schooling. The evaluation involved several researchers working independently and information collected using a variety of both quantitative and qualitative methods (including student and staff interviews and questionnaire surveys, nominal group procedures with staff and administration of instruments assessing student perceptions of classroom-level and teacher perceptions of school-level environment). The most striking finding emerging from almost every aspect of the evaluation was the success of the Colleges in creating a positive ethos for both students and staff. Some of the areas of concern which were identified included a relatively low level of student cohesiveness, confusion about the purpose of the Colleges, the distracting behaviour of some younger students and staff's conditions of service.*

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In 1981, the Premier of Western Australia announced the decision that the Education Department would commence the phasing out of two existing senior high schools at so that two institutions called "Senior Colleges" could be established in 1983. The main reason given for this decision was to improve the educational opportunities available for "second chance" students by providing a new kind of educational institution offering acceptable alternatives to the traditional secondary school for students above the age of compulsory schooling. The Education Department saw the establishment of the Senior Colleges also as an opportunity to review the "overlap" between the secondary and the technical education sectors. This review ultimately led to a recommendation that the Technical Education Division (TED) strengthen its focus on vocational education and relinquish responsibility for the teaching of subjects for the Tertiary Admissions Examinations (TAE) (i.e., the public examinations held at the end of Year 12 to provide a basis for entry to higher education).

An examination of the personal characteristics and needs of the full-time technical education students who were enrolled in the TAE, however, indicated that it would not be appropriate simply to redirect them to existing high schools. The students typically were older and differed psychologically and sociologically from the usual high school students. It appeared that a separate site for full-time mature-age TAE students was preferable. At the same time, it was noted that the traditional academic curriculum didn't provide adequately for students who were staying on in Years 11 and 12 but who did not intend to continue their education at a tertiary institution.

There is a convergence of the needs of second chance TAE students who were being accommodated with difficulty in technical colleges and second chance students who wished to upgrade their level of schooling or to undertake transition-to-work studies. Both groups required general education in an adult setting, with provision for full-time, part-time and short-term courses with maximum flexibility. In short, the major aims of the two Senior Colleges, Canning and Tuart, were: to provide a separate site and ethos appropriate to older students undertaking Tertiary Admission Examination (TAE) studies; and to provide a more flexible style of course organization and teaching approaches for students wishing to repeat Year 10 courses or undertake alternative courses. In addition to providing courses to prepare students for entry to higher education, the Senior Colleges offer a variety of preparatory, transition, general interest and leisure courses.

Typically the number of students enrolled in each of the Senior Colleges is approximately 4,000, annually although it should be remembered that a large proportion of these attended on a part-time basis or for only part of a complete year. Whereas about 30 per cent of student pursue matriculation studies in an attempt to qualify for entry into higher education, the rest of the student population follow a variety of personal development, adult education and transition education courses. About 60 per cent of College students are born in Australia and a comparable number of males and females are found in matriculation courses, although females outnumbered males in the other types of courses. In matriculation classes, about three-quarters of students are under 25 years of age and have never been married. On the other hand, in

personal development and adult education courses, the majority of students (over 80 per cent) are at least 25 years old and approximately half have never been married.

PURPOSE

The purpose of this paper is to describe the methodology of, salient findings from and major issues emerging from an evaluation of the Senior Colleges.

METHODOLOGY

A distinctive methodological feature of the evaluation was that it used a combination of quantitative methods (involving questionnaire surveys mainly) and qualitative methods (involving mainly interviews). This approach is consistent with that advocated in the evaluation literature by several writers. [1-4] Similarly, in a book from the Stanford Evaluation Consortium, Cronbach and colleagues [5] advocate that the large majority of evaluations should include both quantitative and qualitative methods at appropriate times and in appropriate amounts and that "those who advocate an evaluation plan devoid of one kind of information or the other carry the burden of justifying such exclusion" (p. 223).

Another methodological issue worth mentioning is that the different evaluators involved in the study worked largely independently of each other. This was done so that there could be not only a synthesis of data collected by a variety of quantitative and qualitative methods, but also a combination of information obtained by numerous researchers working independently. Although any particular evaluation method has well-known limitations, the use of several different methods allows for some of these errors to "cancel out" and for conclusions to be reached with much greater confidence.

A "nominal group" procedure [6] was used to identify what three separate small groups of staff considered were the Senior Colleges' most positive and most negative features. Three samples of approximately 10 staff each wrote down what were considered to be the five most important positive factors and the five most important negative factors influencing College effectiveness. After each group discussed and clarified individual members' choices, it was possible to obtain measures of the relative importance of the different factors.

Another noteworthy aspect of the methodology is the way that the ethos of the Colleges was investigated by the use of inventories assessing student perceptions of their classroom-level environment and teacher perceptions of their school-level working environment. [7] Furthermore, as this was the only part of the evaluation study which involved the use of control groups, it was hoped that some light would be shed on the distinctiveness of the ethos of the Senior Colleges relative to conventional high schools. Students' perceptions of classroom personalization, involvement, student cohesiveness, satisfaction, task orientation, innovation and individualization were assessed using the College and University Classroom Environment Inventory (CUCEI), [8] whereas teachers' perceptions of school-level affiliation, professional

interest, achievement orientation, formalization, centralization, innovativeness, resource adequacy and work pressure were measured with the School-Level Environment Questionnaire (SLEQ). [9]

The large amounts of qualitative information gathered were organized for reporting purposes using themes or issues as recommended by Stake. [10] [11] "An issue is a matter about which people are concerned ... It may be something that calls for watchfulness, needing focus and attention".[12] Themes or issues in qualitative research can be considered as advance organizers analogous to hypotheses in experimental research.

The content of our evaluation report [13] underwent a process of negotiation with the staff of the Senior Colleges. That is, staff's comments about and reactions to drafts of the report were sought and incorporated into subsequent versions of the document. The three criteria of accuracy, fairness and relevance [14] were found to be useful and salient. Important merits of the process of negotiation were that it provided a valuable method by which the evaluation report could be validated,[15] [16] by having the staff check the researchers' account for accuracy, and that it led to a more comprehensive and useful document by having staff add their own comments and perceptions.

RESULTS

Student questionnaire survey

A questionnaire survey involved a large sample of 1219 students, with approximately equal numbers from Canning and Tuart Colleges and of students taking the matriculation (Tertiary Admissions Examinations, TAE) course and other courses. This sample covered full-time and part-time students and represented about 15 per cent of the total annual student population of the Colleges.

One purpose of the student questionnaire survey was to obtain a descriptive profile of the students attending the Colleges in 1985. For example, it emerged that there were significantly more women than men enrolled in Personal Development and Adult Education courses, but comparable numbers of men and women were in the TAE course. About one fifth of students under 25 years of age reported that an Asian language was spoken at home and most of these students were enrolled in the TAE course. Whereas over half of the students under the age of 25 years had attended school previously up to the Year 12 level, only about a third of students aged 25 years or above had attempted Year 12 previously. Furthermore, TAE students under 25 years were six times as likely as students older than this to have been studying in the year prior to our research.

The second important aim of the student questionnaire survey was to collect evaluative information about the Colleges from the same sample of 1219 students. Although the data were made difficult to interpret by the fact that a surprising number of students indicated that certain questions "did not apply to them", the results for student opinions about Senior College staff were still striking. For example, less than four per cent of students disagreed that staff treated them in an adult manner and less than two per cent disagreed that staff were friendly and

approachable. These overwhelmingly positive results concerning staff-student relationships attest to the success of the Colleges in creating a favourable ethos suited to the types of students attending the Colleges. Some open-ended questions revealed that students considered that rewarding aspects of attending the Colleges included the friendly staff, improved student self-esteem and the opportunity to improve current educational standards, whereas unsatisfying aspects perceived by some students were the distracting behaviour of some immature students and some inadequate College facilities (especially the library). An interesting trend evident in the data when responses were broken down into older students (25 years and above) and younger students (below 25 years) is that older students generally expressed somewhat more satisfaction than younger students about many of the aspects of College facilities, amenities and staff covered by the questionnaire.

Student interviews

To complement the information from the student questionnaire survey, further information about student opinions was obtained from in-depth interviews of a small group of 50 students. This sample covered a range of ages, included approximately equal numbers of men and women and involved Asian as well as Australian students. Overall the interviews supported the findings of the questionnaire survey in that students generally were highly appreciative of the educational opportunities provided by the Colleges and held positive attitudes towards College staff. Other advantages suggested by some students were that attending a Senior College was considered more prestigious than going to a conventional high school and that they were experiencing positive effects on their self-confidence and self-esteem.

As well, some areas of criticism emerged from interviewing students. For example, interviews corroborated the student questionnaire results that older students were critical of the manners, distracting behaviour and irregular attendance of some of the younger students and that there were some problems with library provisions (e.g., that the overnight loan system was inadequate for students who didn't attend the Colleges every day and that part-time students found that full-timers in the same courses had borrowed many of the relevant books before they could get to them). Both the canteen facilities and car-parking provisions received criticism, thus illustrating the difficulties in catering for adult students at the sites of previous high schools which lack lunch and parking facilities. As well, the enrolment procedures were reacted to negatively by various students. The student interviews also suggested that there could have been some difficulties in creating a sufficiently cohesive student group, but this is not surprising given the diversity of students and the fact that many attended short-term, part-time or in "blocks" that occupied only part of the week.

Staff questionnaire survey and nominal group procedures

Staff opinion was also a major focus in the evaluation which included a questionnaire survey of staff and the application of nominal group procedures used to give sub-groups of staff an opportunity to place perceived positive and negative aspects of the Colleges in priority order. The questionnaire was responded to by 106 College staff, which

represents a high return rate of 85 per cent, whereas the nominal group procedures involved 28 staff in three different groups.

The nominal group procedure facilitates judgemental decision-making in groups.[6] The term "nominal" group is used because the individuals involved don't actually function as a group in the initial stages of the process when verbal exchange between individuals is not allowed. Three representative samples of approximately 10 staff, two from Canning College and one from Tuart College, were asked to write down the most important positive and negative factors that influence the effectiveness

Table 1. Rankings for Positive and Negative Categories at Tuart College

Factor	Rank
Staff and student motivation and attitudes leading to a high morale, few discipline problems and a pleasant learning environment	1
Erosion of working conditions (e.g., hours of work, pay, promotion, more work, too many meetings, insufficient support for staff)	2
Course offerings catering for the community, providing a balance, being interesting and having no prerequisites	3
Decision-making not reflecting needs of students; students not being given first priority; administrative climate; decreasing academic freedom	3
Human factors recognized (e.g., student needs, caring and nurturing environment)	5
Changing image of the College towards a "high school" and the role of the Education Department and the Secondary Superintendents of Education	5
Student problems (long hours, finance, personal, lack of motivation, students attempting the TAE for the first time having problems, insufficient individual assistance, enrolment difficulties)	7
Instability of staff (e.g., administrative, secondments, part-time)	7
College independence in decision making ensuring that changes can occur as needed	9
Teaching techniques suitable for adults (e.g., catering for individual differences and learning styles)	10
Experienced staff	11

of the Colleges. The researcher then drew up a list of positive and negative factors on a whiteboard by asking each member in turn to list the most important factor, then the second most important factor, etc. By assigning weights to different rankings of importance, it was possible to obtain tables of the most important positive and negative factors in each group. For example, Table 1 shows the Tuart College group's rankings of importance of positive and negative factors which influence the effectiveness of the College.

At both Canning and Tuart Colleges, the questionnaire survey and the nominal group procedures both revealed that the most rewarding aspects of teaching at the Senior Colleges included working with motivated adult students, having supportive colleagues and being in a pleasant physical environment. Some of the main unsatisfying aspects identified were work pressures, staffing conditions (especially lack of security of tenure and promotion), inadequate communication with the College administration and the unsettling effect of frequent changes in teaching and administrative staff.

Staff interviews

Further information about staff opinions was based on interviews whose questions were derived from responses to the staff questionnaire. The sample consisted of 27 staff from the two Colleges and areas covered by the interview included the ethos, programs, students, staff job satisfaction, administration and staffing policies at the Colleges.

In response to questions about the College ethos, staff generally felt that the Colleges offered students a positive learning environment that was especially suitable for adult students. As with the staff questionnaire survey and use of nominal group procedures reported previously, the interviews clearly showed that staff valued very highly their involvement with motivated and mature students. The conditions of service and the quality of the staff's professional working environment were referred to frequently in the interviews. There was high agreement among ex-high school staff that their job satisfaction was much greater at the Colleges than it had been when teaching in secondary schools, although they also typically were unhappy that conditions of service denied them permanency at the Colleges and necessitated their eventual return to teach in high schools. In contrast, ex-TAFE staff were less positive about their experiences as teachers at the Senior Colleges and, for some, uncertainty about conditions of service (e.g., promotional prospects) was a source of dissatisfaction. Numerous interview comments also focussed on the place of personal development and community education courses. Some staff in these courses were disillusioned because they felt that their colleagues who taught the TAE courses held personal development and general education courses in low regard. The disparaging comments made by some TAE staff interviewed confirmed these perceptions.

Interviews with senior staff in Colleges and Ministry of Education

Interviews also were conducted with a small number of key people, namely, the Principal and Deputy Principal of each Senior College and certain senior officers in the Education Department (now Ministry of

Education) of Western Australia. It was thought that these people would have unique perspectives which would provide a useful addition to the other information collected in the evaluation study. One of the major issues to emerge from these interviews again was staffing policy. Concern was expressed about the effect on College staff morale of existing variations in conditions of employment between ex-high school and ex-TAFE teachers and about the fact that Senior College teachers appear to have better working conditions than other Education Department employees teaching in high schools. Interviewees thought that determining the ideal duration of staff secondments to the Colleges was important, but there was no agreement about the ideal duration. Also some interviewees felt that it was time to move away from the situation in which the Policy Advisory Committee was the main channel of communication between the Senior Colleges and the Education Department.

Colleges' classroom-level and school-level climate

Further information about both student and staff opinions of the Senior Colleges was obtained from the administration of inventories assessing student perceptions of classroom-level climate and teacher perceptions of school-level environment.[17-19] Because developing an appropriate ethos was a major orientation of the Senior Colleges, the use of these measures of psychosocial climate was especially important. Another important feature of this aspect of the evaluation is that a crucial comparison was made between the environments of the Senior Colleges and those of conventional high schools. Student perceptions were collected from a sample of 536 Senior College students in 45 classes and three control groups, namely, 87 students in 11 technical college classes attended by adults out of interest, 62 students in three Year 11 and 12 classes in conventional high schools which integrated adult and adolescent students, and 57 Year 11 and 12 students in three classes in a conventional high school catering for adolescents only.

The instrument used to assess students' perceptions of classroom environment in the present study was the College and University Classroom Environment Inventory (CUCEI).[8,9] Although the CUCEI was designed specifically for use in higher education classes, inspection of items showed that it was well suited for assessing classroom environment of both Senior College classes and the classes of some comparison groups. The CUCEI contains 49 items altogether, with an equal number of items belonging to each of seven scales, namely, Personalization, Involvement, Student Cohesiveness, Satisfaction, Task Orinetation, Innovation and Individualization. Each item is responded to on a four-point scale with the alternatives of Strongly Agree, Agree, Disagree and Strongly Disagree. The scoring direction is reversed for approximately half of the items. Table 2 clarifies the meaning of each CUCEI scale (which has a common-sense meaning) by providing a scale description and a sample item. A footnote to Table 2 outlines the method of scoring. Table 2 also provides some validation information for the total sample of 742 students in 62 classes involved in the present research. The validity data reported generally support each scale's internal consistency (alpha coefficient) and discriminant validity (using the mean correlation of a scale with the other six scales as a convenient index).

TABLE 2

Table 2. Scale Description, Sample Item, Internal consistency (Alpha Reliability) and Discriminant Validity Mean Correlation with Other Six Scales) for each Scale in CUCEI

Scale Name	Scale Description	Sample Item (Actual form)	Alpha Reliability (N=742)	Mean Correl. with other Scales (N=742)
Personalization	Emphasis on opportunities for individual students to interact with the instructor and on concern for students' personal welfare	The instructor goes out of his/her way to help students. (+)	0.80	0.49
Involvement	Extent to which students participate actively and attentively in class discussions and activities	The instructor dominates class discussions. (-)	0.70	0.47
Student Cohesiveness	Extent to which students know, help and are friendly towards each other	Students in this class get to know each other well.(+)	0.84	0.23
Satisfaction	Extent of enjoyment of classes	Classes are boring. (-)	0.87	0.49
Task Orientation	Extent to which class activities are clear and well organized	Students know exactly what has to be done in our class. (+)	0.70	0.40
Innovation	Extent to which the instructor plans new, unusual class activities, teaching techniques and assignments	New and different ways of teaching are seldom used used in this class. (-)	0.72	0.46
Individualization	Extent to which students are allowed to make decisions and are treated differentially according to ability, interest of rate of working	Students are allowed to choose activities and how they will work. (+)	0.74	0.35

Items designated (+) are scored 5,4,2 and 1 respectively, for the responses Strongly Agree, Agree, Disagree and Strongly Disagree. Items designated (-) are scored in the reverse manner. Omitted or invalid responses are scored 3.

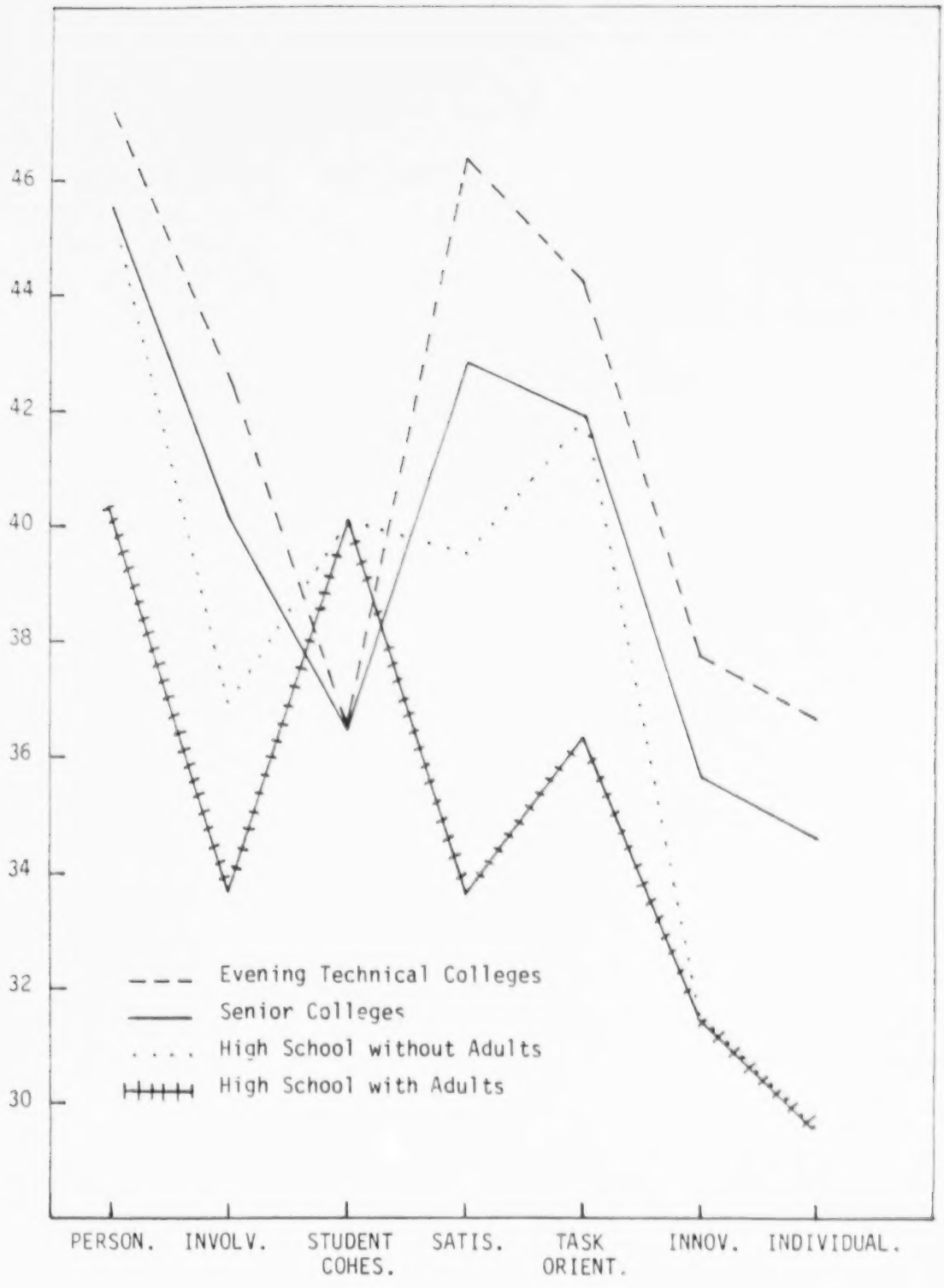

Figure 1. Classroom Environment Profiles for Four Types of Schools

Figure 1 depicts profiles showing differences found between the Senior Colleges and the three types of control schools in terms of the classroom environment dimensions assessed by the CUCEI. In order to facilitate intepretation and provide a more parsimonious picture of the differences, Figure 1 provides a simplified plot of only the statistically significant differences between school types. The first step in the construction of this figure involved the performance of a one-way MANOVA in which the set of seven classroom environment scales constituted the dependent variables and the type of school (Senior College/evening technical college/high school for adults and adoloscents/high school for adolescents only) was the independent variable. Because the multivariate test using Wilks' lambda criterion was statistically significant ($p<0.01$), the univariate ANOVA results were examined for each of the seven scales individually. As these ANOVAs revealed significant findings on all seven scales, Tukey's post hoc procedure was used to establish the statistical significance of pairwise comparisons between each school type on each climate dimension. Figure 1 represents a plot in which any nonsignificant differences between two school types are represented by zero differences by averaging the relevant pairs of scores.

The profiles in Figure 1 reveal some clear general patterns of differences in the favourableness of the classroom environments found in the four school types. Overall the most favourable environments were evident in the evening technical colleges; the next most favourable environments were found in the Senior Colleges; the third most favourable environment emerged in the conventional high school catering only for adolescents; and the least favourable environment occurred in the conventional high school which integrated adults with adolescents within the same classes. The only exception to this general trend emerged on the Student Cohesiveness dimension in that cohesiveness was higher in the conventional high schools than in either the evening technical colleges or the Senior College.

Two of the profiles in Figure 1 can be considered as providing information about the ethos associated with alternative ways of catering for adult learners, namely, through the Senior Colleges or through integrating adults with adolescents in a conventional high school. The other two profiles can be thought of as providing a basis for a comparison of these provisions with first, the very positive classroom environment which would be expected at evening technical colleges where adult learners attend out of interest and, second, a conventional high school for adolescents only. Figure 1 suggests that catering for adult learners through Senior Colleges has lead to class environments which were less favourable than those of the highly positive climates found in evening technical colleges, but more favourable than those of a conventional high school for adolescents. In contrast, it appears that catering for adult learners by integrating them with adolescents in a conventional high school has led to classroom environments which were less favourable than those in a conventional high school catering exclusively for adolescents.

Figure 1 shows that, relative to the Senior Colleges, the evening technical colleges were perceived to have classes with significantly more Personalization, Involvement, Satisfaction, Task Orientation, Innovation and Individualization. But, relative to the conventional high school for adolescents only, the Senior Colleges were perceived to have classes with

significantly more Involvement, less Student Cohesiveness, more Satisfaction, more Innovation and more Individualization. Also, relative to the conventional high school catering for both adults and adolescents, Senior College classes were seen as having significantly more Personalization, Involvement, Satisfaction, Task Orientation, Innovation and Individualization and less Student Cohesiveness.

It is interesting to speculate further about the significant differences in classroom environment found between the Senior Colleges and the conventional high school (i.e., in terms of greater Involvement, Satisfaction, Innovation and Individualization and less Student Cohesiveness). It appears that, by providing a separate site and a more flexible curriculum, the Senior Colleges have achieved classrooms which are perceived by students to have more active participation (Involvement) and to be more satisfying (Satisfaction) relative to the conventional high school. The findings for Innovation and Individualization suggests that, because of their relative newness and freedom from the structures and traditions of regular high schools, the Senior Colleges typically have been able to provide more innovation and variety in their classrooms (Innovation) and greater opportunity for differential treatment of students according to interests, abilities and preferences for ways of learning (Individualization) than in a conventional high school. Because many students attending the Senior Colleges do so on a part-time or short-term basis, it is not all that surprising that the level of perceived Student Cohesiveness was lower in the Senior Colleges than in the conventional high school where all students attend full-time.

As well as assessing students' perceptions of classroom-level climate, the evaluation of the Senior Colleges also made use of the School-Level Environment Questionnaire (SLEQ) [9] to assess teachers' perceptions of school-level climate. The sample consisted of 106 Senior College teachers (which represents over 80 per cent of the population) and a control group of 34 teachers, each in a different conventional high school catering for adolescents. The major finding was that, relative to the control group, Senior College teachers perceived their school-level working environments as characterized by greater professional interest, achievement orientation and innovativeness. [7]

Ex-Senior College students' performance in tertiary education

Another aspect of the evaluation involved information about the participation and success rates of ex-Senior College students at one tertiary institution, namely, the Western Australian Institute of Technology (WAIT) (now Curtin University of Technology). Because a major purpose of the Colleges is to provide an opportunity for students who previously hadn't qualified to enter higher education, the Colleges can be evaluated in part in terms of the performance of ex-students in higher education. An examination of the situation for students enrolled in the Tertiary Admissions Examination at the two Senior Colleges in 1984 indicated that as many as nine per cent of these students entered WAIT in 1985. When the 1985 examination results were examined for a sub-sample of six older students (25 years or more) and 19 younger students (24 years or less) in this group, it was found that all of the older students passed all units in both semesters. Although 13 of the 19 younger students also passed in both semesters, six younger students failed one

or more units (and one of these students was terminated from enrolment at WAIT). Overall, the high participation of ex-Senior College students in tertiary education, the success of all older students and the success of most of the younger students attests to the achievement of the Colleges' goal of giving previously unqualified students a second chance to enter and succeed in higher education.

ISSUES EMERGING FROM THE EVALUATION

In this section, the evaluation's most salient findings are drawn together and summarized as the following seven key issues: the ethos of the Senior Colleges; student cohesiveness; the purpose or mission of the Senior Colleges; College facilities; the distracting behaviour of some younger students; organizational relationships with the Ministry of Education; and staff members' conditions of service.

Ethos of Senior Colleges

Because a major intention when setting up the Senior Colleges was the creation of a distinctive ethos appropriate for the Colleges' "second chance" clients including many older students, it is appropriate that a major focus in the evaluation was student and staff perceptions of College ethos. The evidence which emerged about the ethos of the Colleges was quite considerable. Both a questionnaire survey of students and student interviews revealed that students viewed staff in a most favourable light; the staff questionnaire survey and nominal group procedures showed that staff perceived the Colleges very favourably in terms of the benefits of working with motivated adult learners, with committed colleagues and in a pleasant physical environment; staff interviews further confirmed that College staff generally perceived a positive College ethos especially well-suited to adult learners; and administration of some classroom and college/school environment instruments revealed that, relative to some control groups, students viewed their classes more favourably in terms of greater involvement, satisfaction, innovation and individualization, whereas staff viewed their College working environments more favourably in terms of greater professional interest, achievement orientation and innovativeness. When this evidence emerging from multiple data-gathering approaches and from several researchers working independently is considered together, there is little doubt that the Senior Colleges were highly successful in creating a positive ethos which is distinct from that of conventional high schools and which appears suited to the Colleges' second chance students.

Student cohesiveness

Although a lot of evidence supported the generally positive ethos prevalent in the Senior Colleges, the use of classroom environment instruments and student interviews suggested that student cohesiveness was lower than desired by some students and lower than in high schools. In many ways, this is not surprising given the diversity of students at the Colleges and given that College students attend short-term or part-time in contrast to high school students who attend full-time over a number of years.

Purpose or mission of Senior Colleges

Although the Colleges were established to provide a broad range of courses to cater for the variety of "second chance" students, staff interviews provided some evidence that not all of the Colleges' courses were held in equal esteem by College staff. At least in some staff members' minds, the Tertiary Admissions Examinations (TAE) course, which prepares students to qualify for entry into higher education, was afforded much higher status than certain other personal development and general education courses. This situation created a degree of disillusionment among staff who taught in and valued highly the courses whose orientation was personal development or general education. There was also evidence from the student interviews to suggest that some students felt isolated from the rest of the Senior College community and under some pressure from other students and staff because they were enrolled in personal development or general education courses. Even if held by only a small number of staff and students, these negative views about some of the Colleges' courses suggest the desirability of further discussion and clarification of the mission and purposes of the Colleges.

College facilities

As expected, the student questionnaires and interviews identified some criticisms about College facilities, including the library, car-parking provisions and canteen. Because the Senior Colleges are located in buildings and grounds which previously were high schools, it is not surprising that some facilities are not well-suited to the Colleges' large number of adult students. In particular, the car-parking provisions proved insufficient for the large number of Senior College students travelling by car. Similarly, the canteens designed for a typical high school and the lack of a lunch room were found not to be ideal for adult students. In establishing any future institutions to cater for a student body which includes a large number of adults, it would be wise to consider supplementing the provisions found at high school sites with some additional facilities needed to cater more adequately for adult students.

Distracting behaviour of some younger students

Although there is ample evidence that both staff and students viewed the College environment generally in a very favourable light, student interviews and the questionnaire survey revealed that some older students were distracted by the behaviour of certain younger students. In particular, this subgroup of older students had experienced annoyance at and distraction by the irregular attendance patterns of some younger students and their discourteous behaviour towards teachers.

Organizational Relationship with Ministry of Education

In our interviews with staff, nominal group procedures and interviews with senior Education Department (now Ministry of Education) administrators, the organizational relationship between the Senior Colleges and the Department was considered important. When the Colleges were first established, a Policy Advisory Committee was created as the main channel of communication so that decisions about initiatives and

responses to new demands could be handled expeditiously without the need for the delays typically associated with dealing with head office or regional offices of the Education Department. While this organizational structure enabled the Colleges to achieve certain key ends in their early days, there also seems to have been some associated confusion about the role of superintendents in the Senior Colleges and where the Colleges "fit" within the Department's existing sectoral divisions (e.g., primary, secondary, TAFE). Now that the Colleges are well established, it could be worthwhile to reconsider the place of the Policy Advisory Committee and to explore the desirability of other more conventional ways by which the Senior Colleges might "link" with the Ministry of Education.

Staff members' conditions of service

Staff questionnaire surveys and interviews generally revealed high levels of job satisfaction among Senior College staff, although satisfaction was considerably higher among ex-high school teachers than among ex-TAFE teachers. Nevertheless, conditions of service provided the most frequently mentioned source of dissatisfaction among staff and provided a key issue in our interviews with senior staff in the Colleges and the Department of Education. In particular, associated with their overall satisfaction, some staff members were quite anxious about being forced to leave the Colleges when their period of secondment from the high school or TAFE sector was completed. Other staff members considered that their promotional prospects were being hampered while they worked at the Senior Colleges. Yet another frequently voiced source of dissatisfaction was the way that, instead of there being one set of working conditions, there appeared to be separate conditions for ex-high school and ex-TAFE teachers. In addition, the fact that it was widely perceived that ex-high school teachers had better working conditions in the Senior Colleges than did other similar teachers in high schools was an area of concern to senior Education Department personnel.

CONCLUSION

As with most evaluation studies, our evaluation suffers from the shortcoming that it inevitably describes a past situation which existed at the time of the study (1985, in this case). Consequently, some of our observations and criticisms of the Senior Colleges in 1985 are not necessarily applicable at the present time. Nonetheless, a number of these observations still hold today and it is likely that even outdated observations could be of interest to external audiences wishing to understand some of the "teething problems" likely to be encountered with educational innovations such as the Senior Colleges. Also, there is no absolute guarantee that samples of students and staff chosen for questionnaire survey and interview were completely representative because practical constraints demanded that we relied on certain College staff to help us select samples and because we depended on the students and staff themselves to be willing to provide the information we sought. Nevertheless, it also should be remembered that the credibility of the results is enhanced by our use of some large samples and by combining information obtained through use of different research methodologies and by different researchers working independently.

The most striking finding emerging from almost every aspect of the evaluation is the Senior Colleges' success in their central aim of creating a positive College ethos appropriate to their students. Students reported highly favourable views of the Colleges, especially the way in which they were treated by College staff, and staff expressed much satisfaction with working at the Colleges, particularly with the opportunity to work with motivated adult students who created few discipline problems. It is noteworthy, however, that older students (25 years or more) appeared to have somewhat more favourable views of the Colleges than younger students and that staff seconded from high schools expressed greater job satisfaction than staff seconded from the TAFE sector. Furthermore, in addition to the convincing evidence about the ethos of the Colleges, some other preliminary data suggested that a significant number of ex-College students had gained entry and experienced success in higher education; in turn, this attests to the success of the Colleges in providing a "second chance" for previously unqualified people to qualify for tertiary studies.

The findings of the present study can be compared with those of Anderson, Saltet and Vervoorn's evaluation [21] of Canberra's "secondary colleges". These secondary colleges are similar to Perth's Senior Colleges in that they provide a separate site for the last two years of high school and provide a broad curriculum and emphasis on students managing their own affairs, although the Senior Colleges in Western Australia cater for a broader range of student ages and of course offerings (including personal development and transition education). As in our study of the Senior Colleges in Perth, a major finding of the evaluation of the secondary colleges in Canberra was the contribution which they made in fostering an ethos or environment which senior students viewed favourably and found appropriate to their needs.

Although the overall picture emerging from the evaluation is clearly positive, it still is possible to identify a number of possible areas of concern which could be taken into consideration. The six areas of concern which emerged were the relatively low level of student cohesiveness, confusion about the mission or purpose of the Senior Colleges, College facilities, the distracting behaviour of a subgroup of younger students, the Colleges' organizational relationship with the Ministry of Education and College staff's conditions of service.

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